

1 \ 1. An integrated circuit comprising:  
 2 a first device comprising a first lead, a second lead, and a third lead, wherein said third lead  
 3 of said first device is electrically connected to ground; and  
 4 a second device comprising a first lead, a second lead, and a third lead, wherein said third  
 5 lead of said second device is electrically connected to ground;  
 6 wherein the effective threshold voltage of said first device is more susceptible to be lowered  
 7 by ionizing radiation than is the effective threshold voltage of said second device.

1 2. The integrated circuit of claim 1 wherein said first device comprises an *n*-type metal-oxide  
 2 semiconductor field-effect transistor.

1 3. The integrated circuit of claim 1 wherein said first device comprises a field oxide that has  
 2 been implanted with a material that traps positive charge when said first device is exposed to ionizing  
 3 radiation and said second device has not been implanted with said material.

1 4. The integrated circuit of claim 1 wherein said integrated circuit further comprises a  
 2 microprocessor that comprises a control sequencer coupled to an arithmetic logic unit.

1 5. The integrated circuit of claim 1 wherein said integrated circuit further comprises an  
 2 arrangement of memory cells operatively coupled to an address decoder.

1 6. The integrated circuit of claim 1 wherein said second lead of said first device is connected  
 2 to ground, said third lead of said first device is connected to power, and said third lead of said second  
 3 device is connected to power.

1 7. The integrated circuit of claim 1 wherein said first device shorts power to ground when  
 2 said device has been exposed to ionizing radiation.

1 \ 8. An integrated circuit comprising:  
 2 a first device comprising a first lead, a second lead, and a third lead, wherein said third lead  
 3 of said first device is electrically connected to ground; and  
 4 a second device comprising a first lead, a second lead, and a third lead, wherein said third  
 5 lead of said second device is electrically connected to ground;  
 6 wherein at least a portion of said first device comprises a higher concentration of positive  
 7 charge trapping centers than said second device.

1 9. The integrated circuit of claim 1 wherein said first device comprises an *n*-type metal-oxide  
 2 semiconductor field-effect transistor.

1       **10.** The integrated circuit of claim 1 wherein said integrated circuit comprises a  
2 microprocessor that comprises a control sequencer and arithmetic logic unit.

1       **11.** A method comprising:  
2       fabricating a base layer comprising a first device having a first lead and a second lead, and a  
3 second device having a first lead that is electrically connected to said first lead of said first device;  
4       implanting at least a portion of said first device with a material that traps positive charge  
5 when said first device is exposed to ionizing radiation; and  
6       preventing said second device from being implanted with said material.

1       **12.** The method of claim 11 wherein said first device comprises an *n*-type metal-oxide  
2 semiconductor field-effect transistor.

1       **13.** The method of claim 11 wherein a field oxide in an isolation region associated with said  
2 first device is implanted with said material.

1       **14.** The method of claim 11 further comprising masking said base layer with a resist to  
2 protect said second device from being implanted with said material and to expose said first device to  
3 being implanted with said material.

1       **15.** A method comprising:  
2       fabricating a base layer comprising a first device having a first lead and a second lead, and a  
3 second device having a first lead that is electrically connected to said first lead of said first device;  
4       masking said base layer with a resist to protect said second device from an implantation that  
5 traps positive charge when said second device is exposed to ionizing radiation, and to expose said  
6 first device to said implantation; and  
7       implanting at least a portion of said first device with said implantation.

1       **16.** The method of claim 15 wherein said first device comprises an *n*-type metal-oxide  
2 semiconductor field-effect transistor.

1       **17.** The method of claim 15 wherein a field oxide in an isolation region associated with said  
2 first device is implanted with said material.

1       **18.** A method of operating an integrated circuit, said method comprising:  
2       processing signals with a first device; and  
3       interfering with the operation of said first device with a second device when and only when  
4 said integrated circuit is exposed to ionizing radiation.

1           **19.** The method of claim 18 wherein the exposure of said integrated circuit to ionizing  
2 radiation shorts an output of said first device to ground through said second device.

1           **20.** The method of claim 18 wherein at least a portion of said second device comprises an  
2 implant that facilitates the trapping of positive charge when exposed to ionizing radiation that said  
3 first device does not comprise.

1           **21.** The method of claim 18 wherein the exposure of said integrated circuit to ionizing  
2 radiation disables the operation of said integrated circuit.